(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 13 April 2006 (13.04.2006)

(10) International Publication Number WO 2006/038040 A1

(51) International Patent Classification: G01J 5/52 (2006.01)

(21) International Application Number:

PCT/GB2005/050171

(22) International Filing Date:

30 September 2005 (30.09.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

04256077.1 1 October 2004 (01.10.2004) EP 0421809.5 1 October 2004 (01.10.2004) GB

(71) Applicant (for all designated States except US): BAE SYSTEMS PLC [GB/GB]; 6 Carlton Gardens, London Greater London SW1Y 5AD (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HAQ, Sajad [GB/GB]; BAE SYSTEMS plc, ATC Sowerby P.O. Box 5 Filton, Bristol South Gloucestershire BS34 7QW (GB). HEBBRON, Michael, Christopher [GB/GB]; BAE SYSTEMS plc, ATC Sowerby PO Box 5 Filton, Bristol

South Gloucestershire BS34 7QW (GB). ANGUITA RO-DRIGUEZ, José, Virgilio [ES/GB]; 9 Coltsfoot Place, Hook, Hampshire RG27 9PW (GB). SILVA, Sembukuttiarachilage, Ravi, Pradip [GB/GB]; 29 Verran Road, Camberley, Surrey GU5 2DN (GB).

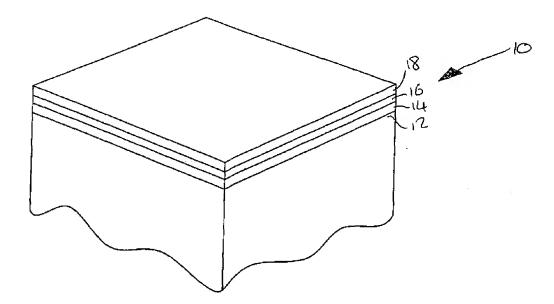
(74) Agent: BAE SYSTEMS PLC, Group IP Dept; P.O. Box 87, Lancaster House, Farnborough Aerospace Centre, Farnborough Hampshire GU14 6YU (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, $KG,\ KM,\ KP,\ KR,\ KZ,\ LC,\ LK,\ LR,\ LS,\ LT,\ LU,\ LV,\ LY,$ MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: HIGH-EMISSIVITY RADIATOR



(57) Abstract: This invention relates to a radiator 10 and to a method of making a radiator. In particular, this invention relates to a radiator 10 having thin-film 5 coatings that serve to increase the thermal emissivity of the entire structure. A radiator 10 is provided comprising a substrate 12, an amorphous carbon layer 16 and the metallic carbide forming layer 14 interposed between the substrate 12 and amorphous carbon layer 16. In addition, a method of making a radiator is provided comprising the steps of forming the metallic carbide-forming layer on 10 a substrate and forming an amorphous carbon layer on the metallic carbide-forming layer.

WO 2006/038040 A1



FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.